

## Assistant Agricultural Research Scientist II Position: Forest Ecologist

**Summary of Duties:** The Connecticut Agricultural Experiment Station (CAES) is seeking a forest ecologist (Assistant Agricultural Scientist II) to establish a nationally recognized research program focused on increasing forest resiliency to climate change. This position will enhance the recognized forest dynamics and management program at CAES. Research areas could include, but are not limited to, the impacts on climate change on forest carbon dynamics and sequestration, resiliency management practices, or other closely related fields. The scientist will have access to greenhouses and research farms, noncompetitive formula funds and startup funding to equip their laboratory, and access to data and field sites from ongoing long-term studies initiated by emeritus faculty. The scientist will form interdisciplinary collaborations with researchers at the CAES and other institutions, seek external funding, and frequently communicate research findings through peer-reviewed publications along with scientific and stakeholder presentations. This is a permanent, full-time, state funded research position with a starting salary of \$85,905/year with competitive medical, dental, and pension benefits.

**Required qualifications** are a Ph.D. in forestry, ecology, or a closely related discipline, demonstrated research productivity and track record of scholarly publications in peer-reviewed journals, and demonstrated strength in oral and written communications.

**Preferred qualifications** include potential to acquire and manage external funding, participation in productive collaborations, experience communicating with the natural resource professionals and general public, scientific leadership and service, and commitment to diversity in science.

**Application instructions:** Candidates should submit the following electronically in a single PDF file: 1) A cover letter summarizing qualifications and briefly stating research interests; 2) a Curriculum Vitae; 3) a statement of future research interests (3 pages max.); 4) contact information for three references along with a concise statement of the individual's relationship to the candidate. The application package should be sent to: Jeffrey S. Ward, Ph.D., Chief Scientist Emeritus, Dept. Environmental Science and Forestry, The Connecticut Agricultural Experiment Station, [Jeffrey.Ward@ct.gov](mailto:Jeffrey.Ward@ct.gov). Review of application materials will begin after August 14, 2022 and continue until the position is filled.

**About Us:** Founded in 1875, CAES is a state-supported scientific research institution and government agency with 100 scientists, technicians, and staff that support integrated research spanning plant, environmental, and human health at our main campus in New Haven, a 75-acre research farm in nearby Hamden, and at two satellite farm and laboratory facilities. CAES fosters a highly collaborative and collegial research environment and maintains close ties to nearby academic institutions including Yale University, University of Connecticut, USDA Forest Service, Southern Connecticut State University, and state/private landowners.

Equal employment opportunity means employment of people without consideration of age, ancestry, color, criminal record (in state employment and licensing), gender identity or expression, genetic information, intellectual disability, learning disability, marital status, mental disability (past or present), national origin, physical disability (including blindness), race, religious creed, retaliation for previously opposed discrimination or coercion, sex (pregnancy or sexual harassment), sexual orientation, veteran status, and workplace hazards to reproductive systems unless the provisions of sec. 46a-80(b) or 46a-81(b) of the Connecticut General Statutes are controlling or there are bona fide occupational qualifications excluding persons in one of the above protected classes. To file a complaint of discrimination, contact Dr. Jason White, Director, The Connecticut Agricultural Experiment Station, P.O. Box 1106, New Haven, CT 06504, (203) 974-8440 (voice), or [Jason.White@ct.gov](mailto:Jason.White@ct.gov) (e-mail). CAES is an affirmative action/equal opportunity provider and employer. Persons with disabilities who require alternate means of communication of program information should contact the Chief of Services, Michael Last at (203) 974-8442 (voice), (203) 974-8502 (FAX), or [Michael.Last@ct.gov](mailto:Michael.Last@ct.gov) (e-mail).

## Existing CAES Studies That Could Be Used for Forest Carbon Dynamics and Climate Resiliency Research

These studies will provide the new scientist with data sets to immediately begin analyses of forest carbon storage/sequestration dynamics and forest resiliency. These would serve as both a starting point and a bridge to studies initiated by the new scientist.

### Medium and long-term research studies

- Utilize Old-Series and New-Series studies to examine forest carbon dynamics over 95 and 62 years, respectively. These studies include decadal measurements of over 50,000 trees on eight study areas (~240 acres). NRCS CT recently completed Level 1 (highest level) raster mapping of soil characteristics on these tracts which could be included in tree growth and carbon sequestration models. Collaborators include CT-DEEP Forestry, Great Mountain Forest, NRCS-CT, and the White Memorial Foundation.
- Utilize cutting method study begun in 1980 to examine the influence six management prescriptions on forest resiliency to climate change. The study includes periodic measurement of 1868 trees on three study areas (~88 acres) over a 37–40-year period. Collaborators include NRCS-CT, SCC Regional Water Authority, White Memorial Foundation, and The Nature Conservancy.
- Utilize precommercial study begun in 1988 to examine influence of weather and release on tree growth and carbon sequestration in young forests. The study includes annual measurements of 7850 saplings on seven study-areas (~21 acres) over a 35-year period (with CT-DEEP Forestry).
- Utilize crop tree study begun in 2004 to examine influence of weather and three management prescriptions on tree growth and carbon sequestration in mature oak forests. The study includes annual measurements of 2472 sawtimber trees on six study areas (~90 acres) over a 16-year period. Collaborators include University of Vermont, Penn State, USDA Forest Service, CT-DEEP Forestry, SCC Regional Water Authority, Metropolitan District Commission, Torrington Water Company.
- Other data sets with periodic measurements of geo-referenced trees that be used to examine carbon storage and sequestration include: Blue Ribbon (est. 1995, eight study areas); wetland communities (est. 1998, three study areas); forest rehabilitation (est. 2012, five study areas); and storm-resistant roadside forestry (est. 2013, six study areas). Collaborators include UConn, CT-DEEP, SCC Regional Water Authority, Connecticut Water Company, Manchester Water,

### Short-term studies

- Continue working with multi-state Forest Ecosystem Monitoring Cooperative to provide the information needed to understand, manage, and protect the region's forested ecosystems in a changing global environment. **An estimated \$35,00 funding for interns will remain available on September 1, 2022** with the potential of continuing funding. Collaborators include University of Vermont, CT-DEEP Forestry, and others.
- Examine the influence of browse exclusion on forest regeneration. The study includes six study areas in CT, RI, and MA (~160 acres). Collaborators include Cornell University, The Forest Stewardship Guild; Massachusetts Department of Conservation and Recreation, Division of Water Supply Protection; Metropolitan District Commission; SCC Regional Water Authority).